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Ehren Seybert
CPUC
Energy Division
505 Van Ness Avenue
San Francisco, CA 94102

Re: Reply Comments of Brightline Defense Project on NEM Cost-Benefit
Phase 1 Scope and Method

Dear Mr. Seybert,

Pursuant to the directions provided by the Energy Division, Brightline Defense Project (“Brightline”) submits these informal reply comments on the proposed Scope of Work for the Commission’s Net Energy Metering (NEM) Study. Brightline offers two brief recommendations for your consideration.

1. The Study Should Include a Full Set of Sensitivity Analyses Proposed by the Joint Parties

Brightline agrees with the comments of the Solar Energy Industries Association, Vote Solar Initiative, Sierra Club California, and California Solar Energy Industries Association (“Joint Parties”) that focusing on the power exported to the grid from NEM systems (the “export-only” case) is the correct way to analyze the costs and benefits of NEM. The scope of a cost/benefit analysis of NEM should be limited to the power that is exported to the grid from NEM systems, and should not include the output from behind-the-meter generation that serves the customer’s on-site load. Additionally, Assembly Bill 2514 (AB 2514) does not mandate an approach to only consider the entire output of NEM systems (the “all-output” case). Limiting the study to the entire output of NEM systems

would skew the study's results and potentially lead to inconsistency with its demand-side cost effectiveness policies and methods adopted in R. 09-11-014.

As a result, Brightline supports the position that the Commission should perform the full set of sensitivity analyses proposed by the Joint Parties and the Energy and Environmental Economics (E3) consulting firm. E3 would analyze NEM from both perspectives (the export-only case and the all-output case), and this approach would comply with AB 2514. Given that the CPUC's 2010 NEM Cost-Effectiveness Evaluation analyzed only the export-only scenario, the study should provide the Commission with the information it needs to fully assess costs and benefits. Consequently, the study should analyze NEM from both export-only and all-output/all-generation perspectives.

2. The Study Should Include Transmission and Distribution (T&D) Avoided Costs

Brightline supports E3's approach to include avoided T&D costs in the base case for several reasons. Solar photovoltaic (PV) technology not only extends distribution equipment life but results in a number of other cost savings.¹ Additionally, SCE's Coincidence Study notes that commercial & industrial (C&I) customers experience significant benefits associated with PV systems and suggests significant T&D value by alleviating the system peak load. Finally, statistical methods can be used to accurately predict T&D benefits of NEM technologies, and these benefits will subsequently be easy to measure for the NEM study.

In including the avoided T&D costs, the E3 avoided cost model should look at marginal T&D costs filed in each utility's most recent electric ratemaking proceedings. As stated in the comments of the Joint Parties, E3's longstanding temperature-based valuation of avoided T&D costs remains valid for broad programmatic evaluations such

¹ Cost savings result from deferral of transformer and transmission line upgrades and extension of maintenance intervals, reduction of line losses, and improvement of distribution reliability, all shown to be linked to solar PV. T. Hoff, D.S. Shugar; "The value of grid-support photovoltaics in reducing distribution system losses," Energy Conversion, IEEE Transactions, vol.10, no.3, pp.569-576, Sept. 1995; Shugar, D.S.; "Photovoltaics in the utility distribution system: The evaluation of system and distributed benefits," Photovoltaic Specialists Conference, 1990, Conference Record of the Twenty First IEEE, pp.836-843 vol.2, 21-25 May 1990; T. Hoff, D.S. Shugar; "The value of grid-support photovoltaics to substation transformers," Proceedings for 1994 IEEE/PES winter meeting. Mousavi Agah, S.M.; Askarian Abyaneh, H.; "Quantification of the Distribution Transformer Life Extension Value of Distributed Generation," Power Delivery, IEEE Transactions, vol.26, no.3, pp.1820-1828, July 2011.

as this one, because it is based on a key driver (temperature) of distribution circuit loads on summer afternoons and evenings. This approach has been consistent with the Commission's practice for determining cost-effectiveness of renewable distributed generation systems, and E3 should not fundamentally alter its approach now.

Conclusion

Brightline appreciates the opportunity to present these brief reply comments on the proposed scope of work for the NEM Study, and we look forward to the study's results.

/s/
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